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ABSTRACT

A discussion of the language skills of Maya-speaking children in Mexico describes the relationship of Maya and Spanish languages in this population's education and reports on a study of the construction of orthography by these children. The study first examines how language is used in literacy education and the difficulties of literacy in a language that does not lend itself easily to the available alphabets. Issues in using the indigenous language for instruction are then explored, and it is noted that indigenous languages are not taught as an academic subject in Mexico. The study of orthography in Maya-speaking children involved asking native Maya-speaking fourth-graders, taught in Spanish, to write a list of words in Maya. The distinctions between Spanish and Maya phonology and orthography made by the children are discussed. Implications are drawn for bilingual education. Contains 6 references. (MSE)

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The Construction of Orthography by Maya-Speaking Children

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Alejandra Pellicer

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INTRODUCTION

It is difficult nowadays to speak seriously about literacy in indigenous languages. As most researchers and educators who work in this field know, there are numerous problems to be found. Without meaning to make an exhaustive analysis on this subject, we would like to refer to one particular point that is closely related to linguistic and educational policies in Mexico.

One of the most important questions that both teachers and researchers in the field of bilingual education ask is: which should be the language of literacy and/or instruction in the first grades of elementary school? Many teachers consider it of the utmost importance that Spanish should be introduced as early as possible in the educational process (both orally and in the written form). The reason for this is that they expect the proficiency in Spanish to be a facilitator for the efficient learning of other academic subjects that will obviously be evaluated in that language. However, very frequently in these discussions, teachers confuse three concepts that should, to our way of thinking, be differentiated; these are: "language of literacy," "language of instruction," and "language as an academic subject."

These concepts should be discussed carefully to clarify what role language (in the broader sense) should have in bilingual education. In this paper, our goal is to:

a) discuss the three concepts we have already mentioned,

b) show the kind of arguments a group of Mayan children use to justify their particular orthography in their native language (Maya).

We would also like to emphasize the advantages of real and simultaneous bilingual teaching of reading and writing.

THE LANGUAGE OF LITERACY

When we talk about the language of literacy we refer to the language, be it the native language (L1) or a second language (L2), in which the child learns to read and write.

Although UNESCO (1954) recommends that a child's native language is the ideal language to teach reading and writing, there are still Mexican teachers who teach reading and writing skills in Spanish to children who are native speakers of an indigenous language (Jiménez, 1995). I agree with Bonfil (1991), who sustains that the defense of ethnic pluralism has been strongly discussed

but very little practiced. Although indigenous education has improved, successes have been insufficient in terms of ending illiteracy.

A discussion about the advantages or disadvantages of teaching reading and writing in Spanish or in their native language (in the case of Mexico) is not important unless the concept of literacy is discussed previously. The question "which language is best for reading instruction?" could very well change if our concept of what reading and writing are also changes.

On the one hand, when literacy in bilingual communities is discussed, most researchers feel that alphabets should be created because they offer the best means of representing any given language. Although many indigenous languages are badly suited for an alphabetic script (such as some tonal languages or even some agglutinating languages), different alphabets have been created for them.

In Mexico there is a strong feeling that unless there is an "official" and "trustworthy" alphabet, people from the different ethnic groups cannot fix writing, and thus there is no real way to find a suitable way to teach reading and writing. This bias toward alphabets has a long tradition that can be traced to the time of the Spanish Conquest, when Catholic missionaries started recording the native languages. Nowadays, this bias continues with specialized linguists and bilingual teachers who work in institutions that promote literacy instruction in L1. Most of the discussions about literacy and the teaching of reading and writing in the native language have concentrated on the characteristics of the proposed alphabet: How many and which letters? How many and which diacritics? How should texts be segmented?, etc. Our belief is that speakers of indigenous languages, especially those in a position to take decisions in educational policies, have been worried not only about finding a "good" alphabet, but also about finding the means to make different groups of speakers of the same language agree about their choice of script. Many interesting discussions have resulted about the different proposed alphabets. However, the choice between different orthographic conventions has inhibited potential users of the alphabet, so that people do not write in L1. I completely agree with Emilia Ferreiro when she argues that however rational and scientific

the proposal of an alphabet may be, there is a very important difference between an invented orthographic rule or convention, and an orthographic rule constructed historically after centuries of writing in a given language (as is the case of Spanish and English) (Ferreiro, 1994).

On the other hand, a common notion is that writing can be reduced to a set of characters that represent the sounds of a language. Learning to read and write involves, from this point of view, a series of activities centered on coding sounds and decoding letters. However, this idea of literacy is limited. Giving an alphabet to a community is not the same as giving it a writing system. Literacy is more complex than that: As Ferreiro says (1986) "Literacy (in a strict sense) refers to the acquisition of the written representation of a language". This way, the teaching of reading and writing should reinforce the students capabilities to read critical.

Many educators in bilingual education feel that the teaching of reading and writing in an indigenous language should be completely differentiated from the teaching of reading and writing in monolingual populations. We do not believe it is worthwhile to make a distinction between "literacy" and "bilingual literacy". It is not even certain if it is relevant to ask which language should be used for literacy instruction in an indigenous community. What is really important is to promote an active attitude towards written language, and to promote reading and writing in a variety of situations. Even if it is true that it is not the same to teach reading and writing in urban, monolingual communities (where reading materials are abundant and reading itself is functional) than it is to teach in rural or indigenous areas (where it is hard to find reading materials and literacy does not play an important role), it is important to say that in both cases, the school setting should offer a very rich language of literacy. That is, a language both in the spoken and written forms, that, throughout school years, can show a large variety of discourse structures. Quite obviously, teaching methods and materials should adapt to the population's needs.

Finally, many indigenous children learn to read and write in their own language (before or after they have been taught Spanish) in the most traditional ways (copying, repeating, learning by rote).

This tradition, which is ridiculous for the teaching of dominant languages, is completely absurd for the teaching of languages without orthographic conventions: What is the use of copying something, if that word can be written in a variety of other ways? Why not make the children think which are the best ways to write something instead of making them learn by heart words that do not even have conventional writings? In this sense, experts should re-discuss what the meaning of literacy and learning to read and write really is.

LANGUAGE OF INSTRUCTION

The language of instruction is the one used by the teacher to teach the different academic subjects: Social Sciences, Mathematics, Biology, Geography, and even Spanish. Generally speaking, the language of instruction in most indigenous areas in Mexico is L1, the most natural language for both the teacher and the students, the language that should promote discussion, interchanges, etc.

The use of the indigenous language as a means of oral instruction and the use of Spanish to teach literacy skills creates a very interesting situation. That is, the indigenous language is used in oral contexts, whereas Spanish is used in the written form. While the teacher writes sentences in Spanish on the blackboard, he explains those sentences in the native language of the children. This is not necessarily a bad situation if both the teacher and the students can find the means to contrast and analyze the two languages. We believe that instructional procedures should be bilingual in every way.

In most of the rural, bilingual schools in Mexico, most teaching of contents for academic subjects is done orally and in the indigenous language. In Mexico we have textbooks for every subject and every school grade that are distributed without cost for all the children in all schools in the country. These books are written in Spanish. For most children in indigenous areas, these books are the only written materials they can refer to. There is no real possibility to write and distribute books in indigenous languages for every academic subject (History, Geography, Mathematics,

Biology, and so forth) in Mexico. This means that written materials cannot become a central part of the instructional process in the short run.

LANGUAGE AS AN ACADEMIC SUBJECT

We speak of language as an academic subject to refer to the language that is studied for itself, when it becomes an object of knowledge. Very frequently, teachers believe that when people learn a language (be it indigenous or not), they become more competent in such a language if they become aware of its grammar and if they are able to use metalinguistic terms to refer to parts of the language. This is not necessarily true. The main goal of teaching language as an academic subject is to allow children to analyze the linguistic form in various ways, and not only taking syntax into account. To do this, the teacher should be able to work with different kind of sentences, with different kinds of registers and styles. However, what most teachers do is take small, simple sentences in Spanish to teach grammar. This kind of practice makes the child have a very reduced, simplified model of language, which does not allow her to become aware of the characteristics of the language or to learn more about the language itself, or about the different types of discourses and communicative contexts where it can occur.

Even if the indigenous language is the main language for instruction, in Mexico this language has never become an academic subject. Even if educational authorities have prescribed that reading and writing must be taught in the native language, this literacy training refers only to the teaching of a transcription code, as a way to teach letter-sound correspondences only. After that, teachers introduce Spanish as a second language to promote the children's proficiency in oral language (L2). Finally, they conclude the teaching of literacy skills with Spanish grammar. This sequence, deliberate or not, does not promote the simultaneous use of the written form of both languages. This linear, one way direction should be substituted by another way of looking at the instructional process. Instruction should provide written and oral models of both languages at the same time during all the school grades to allow their use and promote metalinguistic awareness in both. This

would promote literacy in a broad sense. In school, the teaching of reading and writing and instruction in other academic subjects should not become different, successive moments. Rather, reading and writing should become an integral part of school activities in all subjects, at all times. When teachers teach reading and writing skills, they transmit other information as well. In both cases (the teaching of reading and the teaching of academic subjects), knowledge is presented through writing. That is why writing in the indigenous language should become a part of schooling. Both Spanish and the indigenous language should be used as languages of literacy and instruction, and both should be taught as academic subjects.

The natural conclusion is that, in Mexico, bilingual education and the bilingual teaching of literacy do not treat the two languages in the same way. The indigenous language is mostly used as the language of instruction in the first years of schooling and written and spoken Spanish is used for the teaching of language as an academic subject. Either Spanish or the indigenous language are used for initial teaching of literacy skills. How feasible is it to teach reading and writing in both languages simultaneously from the very beginning in the first grade? Allowing both languages to appear simultaneously may significantly contribute to the improvement of literacy skills. Although the goal is not to train children as translators, the constant use and learning of both languages would promote an open and broader sense of bilingualism, allowing children to compare and use both languages. A child who speaks an indigenous language can learn a lot by just establishing relationships between writing and orality in the two languages. We wish to give an example.

A BRIEF SUMMARY OF OUR RESEARCH WITH MAYA-SPEAKING CHILDREN

In a recent study that took place in a community near Valladolid, Yucatan (Mexico), we asked a group of Maya-speaking fourth graders who were taught to read and write in Spanish, to write a list of words in Maya (Pellicer, 1993). These children are proficient in Maya (their L1) and know how to read and write, so the task should not be too difficult. However, children ask themselves very

important questions about orthography. These questions not only refer to the writing of particular words (such as which is the best way to write kan, snake, or k'éek'en, pig) or the choice of particular letters (should these words be written with a [k], a [c], or a [q]?). For most of literate Spanish-speakers, the orthographic choice is restricted to the three letters we have mentioned. For a Maya- speaking child, the range of possibilities is greater because he can consider more variables than a Spanish-speaker.

A Maya child can be aware that in his native language there are two distinct, but similar sounds, such as the phonemes /k/ and /k'/ (the second is one of the five consonant glottalized phonemes that do not exist in Spanish). When children become aware of this contrast (and they do without any specific instruction), they feel the need to mark this difference in their writings. This way, if a child decides to use the letter [k] to write the word kan, can he consider the use of the same letter to write the word k' éek'en? Most of the children in our study do not think so. Some of them use the letter [c] for words with the phoneme /k/, and use the letter [k] for words with the glotillized phoneme /k'/. This is what Lucio wrote:

Writing according to dictionary

Lucio's writing

Translation

k'éek'en

keken

pig

k'aas

kaz

bad

k'oxol

kosol

mosquito

k'áan

kaan

hammock

k'u'uk'

kuuc

sprout

k'an

kan

yellow

kaan

can

snake

ka'an

caan

sky

ku'uk

cuuc

squirrel

kos

cos

sparrow hawk

kay

cay

fish

kéej

ke

deer

Other children make more precise distinctions: they use the letter [c] for words in Spanish, the letter [k] for Maya words with the phoneme /k/ and either [q], [k'] or [g] for words with the phoneme /k'/. Sometimes they even construct digraphs combining these letters: [gc], [kc], [ku], and so on to represent the glotallizad phoneme /k'/. The example of Jose Ildefonso's writing, who uses a large variety of graphic devices, shows this:

Writing according to dictionary

Jose Ildefonso´s writings

Translation

k'éek'en

glegle

pig

k'aas

q'as

bad

k'oxol

q'osol

gnat

k'áan

c'aan

hammock

k'u'uk'

guuk

sprout

k'an

gan

yellow

kaan

kan

snake

ka'an

kaan

sky

ku'uk

kuuk

squirrel

kos

kos

sparrow hawk

kay

kay

fish

kéej

qu'e

deer

The two examples we have given show children's awareness of Maya phonology on the one hand, and of the orthographic and graphic system of Spanish writing on the other. From the phonological point of view, we can see that the choice of letters to represent a stop phoneme is not accidental, even if at a first glance it may seem to be so. The choice of the letter [g] may be because the sound value of this letter is also a velar stop. The only difference is that one is voiced (/g/)and the other is voiceless (/c/). This distinction is not relevant for the Maya language. From the point of view of graphic distribution, (that is, which are the letters and the combinations children choose) the combinations of letters is not accidental either. It is possible to think that children are considering some of the characteristics of the Spanish graphic system to make their written

productions systematic. For instance, the letters [l] and [r] are the only two letters in Spanish that can form consonantal clusters. In both the examples, it is clear that the writing of the word [kéej] (deer) has to conform to the Spanish orthographic rules so that it can be read correctly (in Spanish, the letter [c] sounds /s/ when followed by an E or an I, so that if children write [céej] they would have to read /séej/. In Spanish, the use of [qu], followed by either [e] or [i] is the conventional alternative). It is unquestionable that these Maya children try to sustain an orthographic regularity in their writings, and this is the product of the constant comparison children spontaneously make between languages.

This awareness children show forces us to ask the following question: why not change the kind of discussion we have had concerning bilingualism? Instead of continuing to ask which language should be used to teach reading and writing to children in indigenous communities, we should first become aware of the advantages of contrasting both languages simultaneously. This is what any bilingual child does without any educational intervention. We should also try to give equal chances for both languages to appear in their oral and written forms in bilingual classrooms, the way orality and writing interact in any monolingual school.

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